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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/753,894 | 01/03/2001 | Zoran Kostic | 2000-0137 | 1343 |

26652 7590 05/10/2004

AT&T CORP.
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| EXAMINER |
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HARPER, KEVIN C

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| ART UNIT | PAPER NUMBER |
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2666

DATE MAILED: 05/10/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/753,894

Applicant(s)

KOSTIC ET AL.

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4,5 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4,5 and 7-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

Applicant's arguments with respect to claims 2, 4-5 and 7-13 have been considered but are moot in view of the new ground(s) of rejection. The indicated allowability of claim 7 is withdrawn in view of the newly discovered reference(s) to Baum. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 4-5 and 7-13 are rejected under 35 U.S.C. 103(a) as being obvious over Godoroja (US 5,485,463) in view of Baum (US 6,535,552).

1. Regarding claims 5, 7-9 and 13, Godoroja discloses a method for use in a time division wireless communication system (abstract, lines 1-2). The system transmits simulcasting information and dedicated message information (Figures 4 and 6) from base stations which are proximately located (Figure 3) and have the same wireless frequency channel (col. 3, lines 35-36). Frames are transmitted by the base stations (Figure 6) which comprise control information (Figure 6, item 104, 106, 108) and simulcast information and dedicated message information are allocated to time slots of the same frame according to and predetermined by control information (col. 6, lines 48-52). However, Godoroja does not disclose simulcast information being present in time slots with ~~extended~~ ^{5/7/04} cyclic extension time to mitigate channel dispersion. Baum discloses OFDM symbols used in a TDMA system (col. 11, lines 45-54), where the OFDM information symbols have cyclic extensions or guard times (col. 3, lines 50-67). Therefore, it would have

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been obvious to one skilled in the art at the time the invention was made to have OFDM symbols in the time slots of the system of Godoroja in order to achieve spectrum efficiencies realized by OFDM. Further, Godoroja does not disclose having extended cyclic extensions to mitigate channel dispersion. Baum discloses mitigating greater channel dispersion by using larger cyclic extensions (col. 12, lines 19-31). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have extended cyclic extensions in simulcast information in the invention of Godoroja in order to overcome an increased channel dispersion in the simulcast time slots.

2. Regarding claim 2, in Godoroja the control information is varied between time slots (col. 6, lines 48-52) such that proximate base stations transmit control information (Figure 6, items 117 and 118) at different predetermined time slots (Figure 3; col. 3, lines 63-67).
3. Regarding claims 4 and 11-12, in Godoroja the amount of simulcast information and the dedicated message information varies over time (col. 5, lines 60-65; col. 6, lines 51-53).
4. Regarding claim 10, in Godoroja the slots are interspersed (Figure 6).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Leitch (US 5,038,403) discloses the need to overcome dispersion due to multipath signals in a simulcast system (Figure 2; col. 2, lines 39-58). Van Nee (US 6,175,550) discloses having a variable cyclic extensions or guard times in an OFDM system to achieve desired delay-spread tolerance and signal bandwidth (Figure 2; col. 3, lines 3-21, 32-34 and 48-52).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays from 11:30 AM to 8:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The centralized fax number for the Patent Office is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see pair.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin C. Harper



May 2, 2004



DANG TON
PATENT EXAMINER